

1. Apparatus for preserving the contents of a part filled container, the apparatus comprising
- 5 a stopper with a bi-directional valve, adapted to be removably fitted in an aperture of the container;
- means for extracting a gas from the container, through the valve in the stopper; and
- means for introducing a gas into the container,
- 10 through the valve in the stopper.
2. Apparatus for preserving the contents of a part filled container, the apparatus comprising
- a bi-directional valved stopper, adapted to be
- 15 removably fitted in an aperture of the container;
- a vacuum source communicating with a socket of the apparatus via a first pneumatic circuit, the socket being adapted to form a seal with the stopper, the vacuum source being arranged, in operation, to remove gas from the
- 20 container via the stopper to create a sub atmospheric pressure inside the container;
- means for disconnecting the vacuum source once a first predetermined pressure has been achieved inside the container;
- 25 an inert gas source communicating with the socket via a second pneumatic circuit, the inert gas source being arranged to supply inert gas into the container via the stopper once the vacuum source has been disconnected; and
- means for ceasing the supply of inert gas once a
- 30 second predetermined pressure has been achieved inside the

BEST AVAILABLE COPY

container.

3. Apparatus as claimed in Claim 2, wherein the vacuum source is a vacuum pump, and the means for disconnecting the vacuum source comprises a switch which switches off and stops operation of the pump.

4. Apparatus according to Claim 2 or Claim 3, in which the bi-directional valved stopper is a stopper incorporating a flutter valve.

5. Apparatus according to any one of Claims 2 to 4, further comprising
a second gas source communicating with a socket, the second gas source being arranged, in operation, to supply a second gas into the container via the stopper; and
means for ceasing the supply of the second gas once a third predetermined pressure is reached.

6. Apparatus according to Claim 5, further comprising a second stopper adapted to fit over the bi-directional valved stopper, the second stopper having a non return valve and a retention device.

7. Apparatus according to any one of Claims 2 to 6, in which the inert gas is argon.

8. Apparatus according to any one of Claims 2 to 7, in which the means for stopping the pump is arranged to activate the supply of inert gas.

BEST AVAILABLE COPY

9. Apparatus according to any one of Claims 2 to 8, further comprising a switch biased in the off position by a spring which is in communication with a socket and in which the socket can be displaced against the action of the spring by introduction of the container having the stopper fitted in an aperture, and wherein the displacement of the socket operates the switch to start the pump pumping through the valve.

10

10. Apparatus according to any one of Claims 2 to 9, further comprising a switch biased in the off position by a spring which is in communication with a socket and in which the socket can be displaced against the action of the spring by introduction of the container having the stopper fitted in an aperture, and wherein the displacement of the socket operates the switch to start the supply of the second gas.

11. A method for the preservation of the contents of a part filled beverage container, comprising the steps of removing gas from the container until a first predetermined pressure is achieved; and supplying an inert gas to the container until a second predetermined pressure is achieved.

12. A method according to Claim 11, further comprising the step of supplying a second gas to the container until a third predetermined pressure is reached.

30

13. A stopper for a wine bottle, the stopper having a skirt to seal against the neck of a wine bottle and a bi-directional valve which can open to allow flow through the stopper in either direction when a pressure differential
5 above a threshold level is applied in either direction across the stopper, and which remains closed when a pressure differential below said threshold is applied.

14. A stopper as claimed in Claim 13, wherein the bi-
10 directional valve is a flutter valve.

BEST AVAILABLE COPY